STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

June 14, 2006

DAVID P. LITTELL
COMMISSIONER

Mr. William Parker
Environmental Manager
Boralex Fort Fairfield
P.O. Box 430
Fort Fairfield, ME 04742

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023329
Maine Waste Discharge License (WDL) Application #W007365-5S-D-R
Final MEPDES Permit/WDL

Dear Mr. Parker:

Enclosed, please find a copy of your **final** MEPDES permit and Maine WDL, which was approved by the Department of Environmental Protection. Please read the permit/license and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to call me at 287-7659.

Sincerely,

Bill Hinkel
Division of Water Resource Regulation
Bureau of Land and Water Quality

Enc.

pc: Sean Bernard, DEP Sandy Lao, USEPA, File #7365

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

BORALEX FORT FAIRFIELD, INC.	)	MAINE POLLUTANT DISCHARGE
FORT FAIRFIELD, AROOSTOOK COUNTY	)	ELIMINATION SYSTEM PERMIT
ELECTRIC GENERATING STATION	)	AND
#ME0023329	)	WASTE DISCHARGE LICENSE
#W007365-5S-D-R **APPROVAL**	)	**TRANSFER AND RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, §1251, *et seq.*, and Maine law, 38 M.R.S.A., §414-A *et seq.*, and applicable regulations, the Maine Department of Environmental Protection (Department) has considered the application of BORALEX FORT FAIRFIELD, INC. (BORALEX), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

Boralex has applied to the Department for the transfer and renewal of Waste Discharge License (WDL) #W007365-5O-C-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023329, which was issued to Aroostook Valley Electrical Company on April 23, 2001, and expired on April 23, 2006. The 4/23/01 MEPDES permit authorized the monthly average discharge of up to 68,160 gallons per day (GPD) and a daily maximum of up to 138,000 GPD of non-contact cooling water, facility process wastewater, woodpile leachate, site runoff, and storm water runoff from a wood-fired electrical generating station to the Aroostook River, Class C, in Fort Fairfield, Maine.

In this permitting action, the applicant seeks 1) to renew its authorization to discharge the waste streams described above; 2) to transfer ownership from Aroostook Valley Electrical Company to Boralex Fort Fairfield, Inc.; and 3) seeks authorization to discharge cooling tower mist discharges carried by storm water runoff.

PERMIT SUMMARY

This permitting action is similar to the 4/23/01 permitting action in that it is:

1. Carrying forward the monthly average and daily maximum discharge flow limitations of 68,160 GPD and 138,000 GPD, respectively;

2. Carrying forward the monthly average and daily maximum technology-based concentration and mass limitations for total suspended solids (TSS);

3. Carrying forward the daily maximum technology-based concentration limit for oil and grease;

4. Carrying forward the daily maximum temperature limitation; and

5. Carrying forward the daily maximum pH range limitation.

This permitting action is different from the 4/23/01 permitting action in that it is:

1. Establishing a monthly average technology-based concentration limitation of 15 mg/L for oil and grease;

2. Eliminating the daily maximum concentration limitation for total residual oxidants;

3. Establishing monthly average and daily maximum concentration limitations of 0.2 mg/L and 0.5 mg/L, respectfully, for free available chlorine;

4. Establishing monthly average and daily maximum technology-based concentration and mass limitations for total chromium;

5. Establishing monthly average and daily maximum technology-based concentration and mass limitations for total zinc;

6. Establishing Special Condition F which requires the facility to implement and maintain as current a Storm Water Pollution Prevention Plan (SWPPP) to address all areas on the facility property that generates storm water runoff which is subsequently discharged via Outfall #001A; and

7. Revising the sample type for TSS from "24-hour composite" to "grab."

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated June 12, 2006, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and

   (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in Maine law, 38 M.R.S.A., §414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of BORALEX FORT FAIRFIELD, INC. to discharge a monthly average flow of up to 68,160 gallons per day (GPD) and a daily maximum flow of up to 138,000 GPD of non-contact cooling water, wood fuel storage area leachate, site runoff, cooling tower mist and storm water from a treatment lagoon to the Aroostook River, Class C, in Fort Fairfield, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. The expiration date of this permit is five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 16TH DAY OF June, 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 7, 2006
Date of application acceptance: February 7, 2006

FILED
JUN 21 2006
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

Date filed with Board of Environmental Protection: _____.

This Order prepared by William F. Hinkel, BUREAU OF LAND & WATER QUALITY
#ME0023329 / #W007365-5S-D-R June 12, 2006

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **non-contact cooling water, wood fuel storage area leachate, site runoff, cooling tower mist, and storm water via Outfall #001A** to the Aroostook River at Fort Fairfield. Such discharges shall be limited and monitored by the permittee as specified below[1], [2]:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow *[50050]*	68,160 GPD *[07]*	138,000 GPD *[07]*	---	---	Continuous *[99/99]*	Recorder *[RC]*
TSS *[00530]*	17 lbs./day *[26]*	57 lbs./day *[26]*	30 mg/L *[19]*	100 mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
Oil & Grease *[00552]*	---	---	15 mg/L *[19]*	15 mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
Free Available Chlorine[3] *[50064]*	---	---	0.2 mg/L *[19]*	0.5 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
Temperature[4] *[00011]*	---	---	---	85^0 F *[15]*	Continuous *[99/99]*	Recorder *[RC]*
Total Chromium *[01034]*	0.1 lbs./day *[26]*	0.2 lbs./day *[26]*	0.2 mg/L *[19]*	0.2 mg/L *[19]*	1/Quarter *[01/90]*	Grab *[GR]*
Total Zinc *[01092]*	0.6 lbs./day *[26]*	1.2 lbs./day *[26]*	1.0 mg/L *[19]*	1.0 mg/L *[19]*	1/Quarter *[01/90]*	Grab *[GR]*
pH[5] *[00400]*	---	---	---	6.0 – 9.0 SU *[12]*	Continuous *[99/99]*	Recorder *[RC]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

FOOTNOTES: See Page 6 of this permit for applicable footnotes.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

FOOTNOTES:

1. **Monitoring** – All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Sampling and analysis must be conducted in accordance with: a) methods approved by 40 Code of Federal Regulations (CFR) Part 136; b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136; or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services.

2. **Priority Pollutants** – Pursuant to 40 CFR Part 423.13(d)(1), there shall be no detectable levels of the 126 priority pollutants as specified in *Appendix A to Part 423 – 126 Priority Pollutants*.

3. **Free available chlorine** – Pursuant to 40 CFR, Part 423.12(b)(8), neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine nor total residual chlorine at any time unless the utility can demonstrate to the Department that the units cannot operate at or below this level of chlorination.

4. **Temperature Monitoring** – Temperature monitoring for Outfall #001A is required during the months of June, July, and August of each year only.

5. **pH Range Limitation** – The total time during which the pH values are outside the required range of 6.0 – 9.0 SU shall not exceed 7 hours and 26 minutes in any calendar month and no individual excursion from the 6.0 – 9.0 SU range limitation shall exceed 60 minutes in duration.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters, which would impair the usages designated by the classification of the receiving waters.

4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

SPECIAL CONDITIONS

C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from Outfall #001A. Discharges of wastewater from any other point source that are not authorized under this or another Department permit shall be reported in accordance with Standard Condition B(5), Bypasses, of this permit.

D. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMR's are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the Department assigned inspector (unless otherwise specified by the Department) at the following address:

Department of Environmental Protection
Northern Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
1235 Central Park Drive
Skyway Park
Presque Isle, Maine 04769

E. NOTIFICATION REQUIREMENTS

In accordance with Standard Condition D, the permittee shall notify the Department of the following:

1. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.

2. For the purposes of this section, adequate notice shall include information on:

   a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and

   b. Any anticipated impact of the change in the quantity or quality of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

F. STORM WATER POLLUTION PREVENTION PLAN

With respect to areas of the facility contributing storm water flow subject to this permit, the permittee shall develop, maintain and periodically update a Storm Water Pollution Prevention Plan (SWPPP) for the facility that is consistent with the SWPPP requirements established in the Department's *Multi-Sector General Permit Maine Pollutant Discharge Elimination System Stormwater Discharge Associated with Industrial Activity*, dated October 11, 2005. As the site or any operations conducted on it have changed or are expected to change materially or substantially, the permittee shall modify its SWPPP as necessary to include such changes and notify the Department within 90 days of such modifications to the plan. The permittee shall maintain a copy of the SWPPP and any subsequent revisions at the terminal and shall make the plan available to any Department or USEPA representative upon request.

The SWPPP requirements are intended to facilitate a process whereby the permittee thoroughly evaluates potential pollution sources at the power generating station and selects and implements appropriate measures to prevent or control the discharge of pollutants in storm water runoff. The process involves the following four steps: (1) formation of a team of qualified facility personnel who will be responsible for preparing the SWPPP and assisting the facility manager in its implementation; (2) assessment of potential storm water pollution sources; (3) selection and implementation of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the plan to prevent storm water contamination and comply with the terms and conditions of the permit.

On or before December 1, 2006, the permittee shall submit to the Department, for review and comment, an updated SWPPP which covers all areas on the industrial site that contribute storm water runoff to Outfall #001A ***[PCS Code09299]***.

G. OPERATIONS AND MAINTENANCE (O&M) PLAN

This facility shall have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the waste water treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and EPA personnel upon request.

Within 90 days of completion of new and or substantial upgrades of the waste water treatment facility (excepting the current yet to be completed substantial upgrade), the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

H. REOPENING OF PERMIT FOR MODIFICATION

Upon evaluation of the tests results in the Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at anytime and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded: (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

I. SEVERABILITY

In the event that any provision, or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **JUNE 12, 2006**

PERMIT NUMBER: **#ME0023329**
WASTE DISCHARGE LICENSE: **#W007365-5S-D-R**

NAME AND ADDRESS OF APPLICANT:

BORALEX FORT FAIRFIELD, INC.
P.O. BOX 430
FORT FAIRFIELD, MAINE 04742

COUNTY: **AROOSTOOK**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

BORALEX FORT FAIRFIELD, INC.
CHENEY GROVE ROAD
FORT FAIRFIELD, MAINE 04742

RECEIVING WATER/CLASSIFICATION: **AROOSTOOK RIVER/CLASS C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **MR. WILLIAM PARKER, ENV. MGR.**
(207) 473-7592 ext. 206

1. APPLICATION SUMMARY

Application: Boralex Fort Fairfield, Inc. (Boralex) has applied to the Department of Environmental Protection (Department) for the transfer and renewal of Waste Discharge License (WDL) #W007365-5O-C-R / Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023329, which was issued to Aroostook Valley Electrical Company on April 23, 2001, and expired on April 23, 2006. The 4/23/01 MEPDES permit authorized the monthly average discharge of up to 68,160 gallons per day (GPD) and a daily maximum of up to 138,000 GPD of non-contact cooling water, facility process wastewater, woodpile leachate, site runoff, and storm water runoff from a wood-fired electrical generating station to the Aroostook River, Class C, in Fort Fairfield, Maine via a single outfall point (Outfall #001A).

In this permitting action, the applicant seeks 1) to renew its authorization to discharge the waste streams described above; 2) to transfer ownership from Aroostook Valley Electrical Company to Boralex, Inc.; and 3) seeks authorization to discharge cooling tower mist discharges carried by storm water runoff.

2. PERMIT SUMMARY

a. Terms and Conditions: **This permitting action is similar to the 4/26/01 permitting action in that it is:**

This permitting action is similar to the 4/23/01 permitting action in that it is:

1. Carrying forward the monthly average and daily maximum discharge flow limitations of 68,160 GPD and 138,000 GPD, respectively;

2. Carrying forward the monthly average and daily maximum technology-based concentration and mass limitations for total suspended solids (TSS);

3. Carrying forward the daily maximum technology-based concentration limit for oil and grease;

4. Carrying forward the daily maximum temperature limitation; and

5. Carrying forward the daily maximum pH range limitation.

This permitting action is different from the 4/23/01 permitting action in that it is:

1. Establishing a monthly average technology-based concentration limitation of 15 mg/L for oil and grease;

2. Eliminating the daily maximum concentration limitation for total residual oxidants;

3. Establishing monthly average and daily maximum concentration limitations of 0.2 mg/L and 0.5 mg/L, respectively, for free available chlorine;

4. Establishing monthly average and daily maximum technology-based concentration and mass limitations for total chromium;

5. Establishing monthly average and daily maximum technology-based concentration and mass limitations for total zinc;

6. Establishing Special Condition F which requires the facility to implement and maintain as current a Storm Water Pollution Prevention Plan (SWPPP) to address all areas on the facility property that generates storm water runoff which is subsequently discharged via Outfall #001A; and

7. Revising the sample type for TSS from "24-hour composite" to "grab."

2. PERMIT SUMMARY (cont'd)

b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the facility currently operated by Boralex Fort Fairfield, Inc.

June 21, 1996 – The USEPA issued a renewal of National Pollutant Discharge Elimination System (NPDES) permit #ME0023329 to the Aroostook Valley Electric Company (AVEC). The 6/21/00 permit superseded the NPDES permit issued to this facility by the USEPA on September 29, 1987 (earliest NPDES permit on file with the Department).

May 23, 2000 – Pursuant to Maine law, 38 M.R.S.A. §420 and §413 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W007365-57-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 72.5 parts per trillion (ppt) and 108.7 ppt, respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury. It is noted the limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as limitations and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. However, the interim limitations remain in effect and enforceable and any modifications to the limits and or monitoring requirements will be formalized outside of this permitting document.

January 12, 2001 – The Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program.

April 23, 2001 – The Department issued WDL #W007365-5O-C-R / MEPDES permit #ME0023329 to Aroostook Valley Electric Company (AVEC) for a five year term. The 4/23/01 permit superseded WDL #W007365-57-B-R issued on October 28, 1994 and WDL #W007365-43-A-N issued to Fairfield Energy Venture, L.P. on June 17, 1987.

February 7, 2006 – Boralex Fort Fairfield, Inc. submitted a timely and complete General Application to the Department for transfer (from AVEC) and renewal of the 4/2301 MEPDES permit. The application was accepted for processing on February 10, 2006 and was assigned WDL #W007365-5S-D-R / MEPDES #ME0023329.

2. PERMIT SUMMARY (cont'd)

May 2, 2006 – Boralex submitted to the Department, for review and acceptance, a Notice of Intent (NOI) to Comply with the Maine Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activity. The NOI was submitted for the discharge of storm water runoff from a proposed wood fuel storage area, which Boralex had initially applied for in their 2/7/06 General Application. In conjunction with submission of the NOI for coverage of the proposed discharge under the MSGP, Boralex modified its 2/7/06 General Application to delete all references to Outfall #002A and the proposed storm water discharges from the proposed wood fuel storage area.

c. Source Description:

Power Plant

Boralex Fort Fairfield, Inc. operates a 30-megawatt steam electric power generating station fueled by biomass wood fuels in the Town of Fort Fairfield, Maine. The facility is owned by Boralex, Inc. of Kingsey Falls, Quebec, Canada.

Biomass fuel utilized at Boralex Fort Fairfield consists of conventional wood fuel which is processed off-site. Non-wood related productions are not utilized or permitted for use at the Fort Fairfield facility. Biomass fuel is delivered by enclosed trailer truck to the facility. The facility's fuel receiving system consists of two truck dumpers. Fuel is conveyed to the fuel storage areas by way of fuel yard equipment and is then transferred via fuel reclaiming equipment, additional covered conveyors, and an enclosed steam boiler feed system to the boiler furnace.

The facility's ash removal system consists of an ash conditioning system, enclosed conveyors, and an enclosed ash storage system.

Storm Water and Wood Fuel Storage Area Leachate

Storm water runoff is generated by an approximately 13.2-acre portion of the facility, of which 3.05 acres is considered impervious area. Two log storage areas, which occupy approximately 2.7 acres of land, contribute to storm water and leachate runoff. This portion of the facility generates approximately 69,000 gallons of storm water runoff per day based on calculations for anticipated runoff from a 25-year storm event.

Boralex proposes to construct a new log laydown and fuel storage yard, which will result in additional storm water and leachate runoff. Boralex has submitted a NOI for coverage of this discharge under the Department's Storm Water Multi-Sector General Permit.

A map showing the location of the Boralex facility and receiving waters is included as Fact Sheet Attachment A.

Sanitary waste water generated at Boralex is conveyed to the Fort Fairfield Utilities District for treatment.

2. PERMIT SUMMARY (cont'd)

d. Wastewater Treatment:

Power Plant

Ground water (drilled well source) and municipal water are utilized for cooling tower and process make-up water. Process make-up water is conveyed through a water treatment plant consisting of an activated carbon filter (to remove chlorine and organics) a cation exchanger, an anion exchanger, and a mixed media exchanger. Demineralized water is stored in a 26,000-gallon demineralized water storage tank and is subsequently transferred to a 26,000-gallon condensate storage tank for use as make-up water for the boiler system. Boiler feedwater is treated with di- and tri-sodium phosphate (to reduce scale forming minerals) and caustic (to maintain boiler water pH). The boiler system maintains a continuous blowdown of approximately 5 gallons per minute (GPM), which is directed to a boiler blowdown tank for condensation. During periods of cool weather, boiler blowdown is directed to the cooling tower system to assist in ice reduction of the cooling tower. During periods of warm weather, the blowdown is directed to a 740,000-gallon capacity wastewater treatment/detention lagoon for settling and thermal impact reduction.

The activated carbon filters are cleaned routinely by backwashing to remove accumulated contaminants. Cation resin regeneration is performed utilizing a weak sulfuric acid solution followed by a rinse cycle using demineralized water to remove any residual acid. The anion resin regeneration is performed utilizing a weak caustic solution followed by a rinse cycle using demineralized water. Mixed exchanger bed regeneration utilizes both sulfuric acid and caustic solutions. Wastewater generated by these processes is conveyed to a 7,900-gallon capacity, enclosed neutralization tank where acid or caustic are added for pH neutralization. Neutralized wastewater is conveyed to the facility's wastewater lagoon.

Cooling tower make-up water is treated through a decarbonation process to reduce the concentration of scale-forming mineral contaminants and alkalinity in the make-up water. The weak acid cation exchanger utilizes carblxylic resin, which must be regenerated with a weak sulfuric acid solution to remove mineral contaminants. Wastewater generated by this process is directed to a 19,000-gallon capacity, enclosed neutralization tank for pH adjustment through addition of a caustic solution, aeration, and recirculation. Neutralized wastewater is conveyed to the facility's wastewater lagoon. Circulation make-up water is also treated with phosphates and dispersants to control scale production and a bromine-based biocide for control of biological growth. An algaecide is only used when excessive growth occurs, typically during the summer months. The cooling water system is a closed cycle recirculating system with an induction type cooling water tower. The system maintains a continuous blowdown of approximately 18 GPM, which is directed to an auxiliary cooling water system as its cooling medium. Auxiliary system blowdown is conveyed to the facility's wastewater lagoon. Incidental amounts of cooling tower mist are deposited around the facility and may be discharged with storm water runoff from the site.

2. PERMIT SUMMARY (cont'd)

Storm Water and Wood Fuel Storage Leachate

No structural treatment systems other than detention ponds are in place to treat storm water runoff associated with industrial activities at the site. To the extent practical, best management practices (BMPs) are incorporated to limit the potential for contaminates entering storm water discharge. In addition, Special Condition G of this permit requires Boralex to develop, implement and maintain a Storm Water pollution Prevention Plan for the industrial site. Final effluent from the 740,000-gallon, lined wastewater lagoon is conveyed for discharge to the Aroostook River via Outfall #001A.

A water balance diagram for this facility is included as Attachment B of this Fact Sheet.

3. CONDITIONS OF PERMIT

Maine law, 38 M.R.S.A. §414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A., §420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., Section 467(C)(1)(f) classifies the Aroostook River at the point of discharge as Class C waters. Maine law, 38 M.R.S.A., Section 465(4) describes the standards for Class C waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2004 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists a 17.6-mile reach of the Aroostook River above the Canadian border (Hydrologic Unit Code #ME0101000413 / Waterbody ID #148R) as, *"Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses."* The Report lists all of Maine's fresh waters as, *"Category 4-B-3: Waters Impaired by Atmospheric Deposition of Mercury. Regional or National TMDL may be Required."* Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, *"the impairment is presumed to be from atmospheric contamination and deposition. The advisory is based on probability data that a stream, river, or lake may contain some fish that exceed the advisory action level. Any freshwater may contain both contaminated and uncontaminated fish depending on size, age and species occurrence in that water."*

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Department has no information at this time that the discharge from Boralex Fort Fairfield will cause or contribute to the failure of the receiving water to meet the designated uses of its assigned classification.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Applicability of National Effluent Guidelines: The USEPA has promulgated effluent guidelines for the *Steam Electric Generating Point Source Category* at 40 CFR Part 423. Boralex Fort Fairfield's discharge via Outfall #001A is subject to these guidelines. Applicable sections of 40 CFR Part 423 include:

40 CFR Part 423.12(b)(3): Limits TSS and oil and grease from low volume waste sources
40 CFR Part 423.12(b)(7): Limits free available chlorine in cooling tower blowdown
40 CFR Part 423.13(d)(1): Limits total chromium and total zinc in cooling tower blowdown

b. Flow: The previous permitting action established monthly average and daily maximum discharge flow limitations of 68,160 gallons per day (GPD) and 138,000 GPD, respectively, for Outfall #001A. These limits were based on 1) the 68,160 GPD of wastewater generated by boiler system make-up water (non-contact cooling water), boiler blowdown and system wash water, cooling tower make-up water (non-contact cooling water), cooling tower blowdown, ion exchange backwash wastewater, and leachate from the wood storage area; and 2) the 69,000 GPD of storm water runoff from approximately 13.2 acres of developed area on the facility grounds. The non-process waste streams and the storm water runoff are conveyed and commingled in the facility's wastewater lagoon prior to discharge. Thus, the daily maximum discharge limitation of 138,000 GPD is based on the approximately 69,000 GPD of non-process wastewater plus the approximately 69,000 GPD of storm water runoff. This permitting action is carrying forward both the monthly average and daily maximum discharge flow limitations as they remain representative of wastewater flows conveyed to Outfall #001A. This permitting action is carrying forward the continuous discharge flow monitoring requirement.

A review of the monthly average and daily maximum discharge flow data as reported on the Discharge Monitoring Reports submitted to the Department for the period March 2003 – February 2005 indicates the monthly average flow has ranged from 20,586 GPD to 56,530 GPD with an arithmetic mean of 42,562 GPD. The daily maximum flow has ranged from 29,973 GPD to 129,573 GPD with an arithmetic mean of 82,976 GPD.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

c. Dilution Factors: Dilution factors associated with the permitted discharge flow of 138,000 GPD (0.138 million gallons per day, MGD) from the Boralex facility were derived in accordance with Department rule, 06-096 CMR, Chapter 530 Section 4.A *Surface Water Toxics Control Program* and were calculated as follows:

Acute ¼ 1Q10 = 41.9 cfs $\Rightarrow \frac{(41.9 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 197:1$

Acute: 1Q10 = 167.5 cfs $\Rightarrow \frac{(167.5 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 786:1$

Chronic: 7Q10 = 197.0 cfs $\Rightarrow \frac{(197.0 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 924:1$

Harmonic Mean = 591.0 cfs $\Rightarrow \frac{(591.0 \text{ cfs})(0.6464) + 0.138 \text{ MGD}}{0.138 \text{ MGD}} = 2{,}769:1$

Department rule Chapter 530 Section 4.B.1 states,

> *Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained.*

Boralex has not provided the Department with information as to the actual mixing characteristics of the discharge; therefore, the Department is utilizing the default stream flow of ¼ of the 1Q10 in acute evaluations.

d. Total Suspended Solids (TSS): The previous permitting action established technology-based monthly average concentration and mass limits of 30 mg/L and 17 lbs./day, respectively, for TSS. The previous permitting action established technology-based daily maximum concentration and mass limits of 100 mg/L and 57 lbs./day, respectively, for TSS. The concentration limitations are based on the best practicable control technology currently available (BPT) effluent guidelines promulgated at 40 CFR Part 423.12(b)(3) and are being carried forward in this permitting action.

To ensure pollutant loadings (mass limits) established by this permitting action are at or below previous permit levels, this permitting action is establishing monthly average and daily maximum mass limits for TSS based on the concentration limits cited above and the

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

permitted flow limit of 68,160 GPD (0.068160 MGD). The calculations are as follows:

Monthly Average: (30 mg/L)(8.34)(0.068160 MGD) = 17 lbs/.day

Daily Maximum: (100 mg/L)(8.34)(0.068160 MGD) = 57 lbs/day

A review of the monthly average and daily maximum effluent TSS data as reported on the Discharge Monitoring Reports submitted to the Department for the period March 2003 – February 2005 indicates that monthly average and daily maximum effluent concentration and mass values reported are equivalent (due to a once per month monitoring requirement). The monthly average and daily maximum effluent TSS concentration has ranged from 6 mg/L to 42 mg/L with an arithmetic mean of 11.4 mg/L. The monthly average and daily maximum effluent TSS mass has ranged from 1 lb./day to 11 lbs./day with an arithmetic mean of 5.1 lbs./day.

The previous permitting action established a minimum monitoring frequency requirement of once per month for TSS, which is being carried forward in this permitting action as a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations established in this permitting action. This permitting action is revising the sample type from 24-hour composite to grab.

e. Free Available Chlorine (FAC): The previous permitting action established a daily maximum concentration limitation of 0.20 mg/L for Total Residual Oxidants. The permit stated that the limitation was based on effluent guidelines representing the degree of reduction attainable by the application of the best available technology economically available (BAT) promulgated at 40 CFR Part 423.13. However, the Department has determined that it is more appropriate to apply to BPT effluent guidelines promulgated at 40 CFR Part 423.12 rather than the guidelines at 40 CFR Part 423.13. 40 CFR Part 423.12(b)(7) establishes guidelines for Free Available Chlorine rather than Total Residual Oxidants. The effluent guidelines are expressed in terms of monthly average and daily maximum Free Available Chlorine limitations of 0.2 mg/L and 0.5 mg/L, respectively. Typically, the Department establishes limitations for the discharge of total residual chlorine (TRC) to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. In the case of the discharge from Boralex and the effluent guidelines, this permitting action is establishing limitations for FAC to protect receiving water quality from the discharge of chlorine in toxics amounts. Department permitting actions impose the more stringent of either a water quality-based limitations for Total Residual Chlorine (TRC) or BPT-based limitations for FAC.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

End-of-pipe acute and chronic water quality based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	Modified A & C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.019 mg/L	0.011 mg/L	197:1 (Mod. A) 924:1 (C)	3.7 mg/L	10.2 mg/L

The BPT-based daily maximum concentration limitation of 0.5 mg/L for FAC is more stringent than the calculated acute water quality-based threshold of 3.7 mg/L for TRC and is therefore being established in this permitting action. The BPT-based monthly average concentration limit of 0.2 mg/L for FAC is more stringent than the calculated chronic water quality-based threshold of 10.2 mg/L for TRC and is therefore being established in this permitting action.

This permitting action is establishing a minimum monitoring frequency requirement of once per month for FAC based on a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations established in this permitting action.

This permitting action is eliminating the effluent limitations and monitoring requirements for Total Residual Oxidants (TRO) as the Department has determined that the TRO BAT effluent guidelines promulgated at 40 CFR Part 423.13(b)(1) are not applicable to this discharge. Maine law, 38 M.R.S.A. §464(4)(F) contains what is referred to as the State's antidegradation policy. The Department has determined that the action of eliminating the numeric limit for Total Residual Oxidants is appropriate and justified at this time and will not cause or contribute to the failure of the receiving waterbody to meet the standards of its assigned water quality classification. Elimination of the TRO limit is based on the applicability of effluent guidelines promulgated at 40 CFR Part 423.

f. Oil and Grease: The previous permitting action established a daily maximum concentration limitation of 15 mg/L for oil and grease. Effluent guidelines promulgated at 40 CFR Part 423.12(b)(3) establish monthly average and daily maximum concentration limitations of 15 mg/L and 20 mg/L, respectively, for oil and grease. The previous permitting action stated that the daily maximum limitation of 15 mg/L, which is more stringent than the effluent guidelines for this parameter, were being carried forward from WDL #W007365-57-B-R issued on October 28, 1994 as this limit was more stringent than the BPT-based limit of 20 mg/L. Department rule, 06-096 CMR, Chapter 523, *Waste Discharge License Conditions*, contains what is referred to as the anti-backsliding provision and states, in part, that *"... a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) of the CWA subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit."* Thus, the rule prohibits the Department from establishing a less stringent oil and grease limitation than the previously established daily maximum limit of 15 mg/L. Further, a review of the effluent data on file with the Department for this facility does not support

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

modification of the current limit. Therefore, this permitting action is carrying forward the daily maximum effluent limitation of 15 mg/L for oil and grease.

A review of the daily maximum effluent oil and grease data as reported on the Discharge Monitoring Reports submitted to the Department for the period March 2003 – February 2005 indicates that daily maximum effluent concentration values reported has ranged from 1 mg/L to 16 mg/L with an arithmetic mean of 3.3 mg/L. In the 60-month period from March 2001 – February 2006, the facility has experienced one exceedence of the 15 mg/L limitation.

To ensure that the effluent limitations established for oil and grease are at least as stringent as the national effluent guidelines, this permitting action is establishing a monthly average limitation of 15 mg/L. The previous permitting action established a minimum monitoring frequency requirement of once per month, which is being carried forward in this permitting action based on a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations established in this permitting action.

g. Temperature: The previous permitting action established a daily maximum temperature limitation of 85 degrees Fahrenheit (85°F) and specified that compliance with this limitation shall be based on continuous temperature measurements taken within the wastewater lagoon during the critical water season months of June, July and August of each year. Department rule, 06-096 CMR, Chapter 582, *Regulations Relating to Temperature*, state, in part,

> *No discharge of pollutants shall cause the ambient temperature of any freshwater body, as measured outside a mixing zone, to be raised more than 5 degrees Fahrenheit or more than 3 degrees Fahrenheit in the epilimnion (upper mixed layer) of any lake or pond. In no event shall any discharge cause the temperature of any freshwater body to exceed 85 degrees Fahrenheit at a point outside a mixing zone established by the Board, nor shall such discharge cause the temperature of any waters to exceed the U.S. Environmental Protection Agency's national ambient water quality criteria established to protect all species of fish that are indigenous to the receiving waters at any point outside a mixing zone established by the Board. Site specific criteria, generated from a study conducted according to DEP approved methods for indigenous species of fish as defined in 38 M.R.S.A. Sec. 466, may be substituted for national ambient water quality criteria, so long as the site specific criteria are no less protective of species found to be indigenous to those waters, and so long as the public participation requirements of federal and state law, including those found at 40 CFR Part 25, have been met. When the ambient temperature of any body of water naturally exceeds the limits set forth in this section, no thermal discharge may be allowed which alone or in combination with other discharges would raise the ambient temperature of the receiving water more than 0.5 Degrees*

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Fahrenheit above the temperature which would naturally occur outside a mixing zone established by the Board.

In the previous permitting action, the Department had determined that with an effluent temperature of 85°F, average discharge rate of 68,160 GPD, and a 7Q10 river flow of 197 cubic feet per second, the calculated river potential change (ΔT) would be 0.01 degrees F. This ΔT is less than the 0.5 degrees F threshold established in Chapter 582 and, thus, is protective of receiving water quality and designated uses.

A review of the daily maximum treatment/detention lagoon temperature data as reported on the Discharge Monitoring Reports submitted to the Department for the period June 2001 – August 2005 (months of June, July, and August only) indicates that daily maximum lagoon temperature values reported has ranged from 74°F to 82°F.

This permitting action is carrying forward the continuous lagoon temperature monitoring requirement during the months of June, July and August of each year.

h. pH: The previous permitting action established, and this permitting action is carrying forward, a BPT-based pH limit of 6.0 – 9.0 standard units, which is based on the effluent guideline limitations promulgated at 40 CFR Part 423.12(b)(1), and a continuous monitoring requirement. Department rule, Chapter 525 subsection 4.VIII states, in part, that where a permittee continuously measures the pH of wastewater pursuant to a requirement NPDES permit, the permittee shall maintain the pH of such wastewater within the range set forth in the applicable effluent limitations guidelines, except excursions from the range are permitted subject to the following limitations:

(1) The total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and

(2) No individual excursion from the range of pH values shall exceed 60 minutes.

Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit provides for excursions from the pH range limitation as described above pursuant to Department rule Chapter 525.

A review of the daily maximum effluent pH data as reported on the Discharge Monitoring Reports submitted to the Department for the period March 2003 – February 2006 indicates that the facility has been in compliance with the pH range limitation 97% of the time during said period with one exceedence (9.1 SU during May 2003).

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

i. Total Chromium: The previous permitting action neither established nor addressed effluent limitations for total chromium. The USEPA has promulgated effluent guideline limitations for total chromium at 40 CFR Part 423.13(d)(1), which are applicable to the discharge of wastewater from the Boralex facility. Therefore, this permitting action is establishing monthly average and daily maximum concentration limits of 0.2 mg/L for total chromium based on the effluent guidelines. Department rule Chapter 523, *Waste Discharge License Conditions*, Section 6, *Calculating NPDES permit conditions*, sub-section f(2) states that "*... pollutants limited in terms of mass additionally may be limited in terms of other units of measurement and the permit shall require the permittee to comply with both limitations.*" Therefore, this permitting action is establishing mass limitations for total chromium using the applicable criteria and discharge flows as follows:

Monthly Average Chromium Mass Limit: (0.2 mg/L)(8.34)(0.068160 MGD) = 0.1 lbs/.day

Daily Maximum Chromium Mass Limit: (0.2 mg/L)(8.34)(0.138 MGD) = 0.2 lbs/day

This permitting action is establishing a minimum monitoring frequency requirement of once per calendar quarter for total chromium based on a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations established in this permitting action.

j. Total Zinc: The previous permitting action neither established nor addressed effluent limitations for total zinc. The USEPA has promulgated effluent guideline limitations for total zinc at 40 CFR Part 423.13(d)(1), which are applicable to the discharge of wastewater from the Boralex facility. Therefore, this permitting action is establishing monthly average and daily maximum concentration limits of 1.0 mg/L for total zinc based on the effluent guidelines. In accordance with Department rule Chapter 523, *Waste Discharge License Conditions*, Section 6, *Calculating NPDES permit conditions*, sub-section f(2), this permitting action is establishing mass limitations for total zinc using the applicable criteria and discharge flows as follows:

Monthly Average Zinc Mass Limit: (1.0 mg/L)(8.34)(0.068160 MGD) = 0.6 lbs/.day

Daily Maximum Zinc Mass Limit: (1.0 mg/L)(8.34)(0.138 MGD) = 1.2 lbs/day

This permitting action is establishing a minimum monitoring frequency requirement of once per calendar quarter for total zinc based on a Department best professional judgment determination of the minimum level of monitoring necessary to assess compliance with the numeric limitations established in this permitting action.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

k. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing: Maine law, 38 M.R.S.A., §414-A and §420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department rule, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program* (toxics rule) sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. Department rule 06-096 CMR Chapter 584, Surface *Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

Chapter 530 Section (2)(A) specifies the dischargers subject to the rule as, *"all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria."*

Boralex does not discharge industrial process wastewater or domestic wastes as defined by Chapter 530. Further, 40 CFR Part 423.13(d)(1) and Special Condition A of this permit specify that there shall be no detectable levels of the 126 priority pollutants as specified in *Appendix A to Part 423 – 126 Priority Pollutants.* The Department has no information at this time that the discharge from Boralex contains toxic compounds in toxic amounts and is not requiring the facility to perform WET, priority pollutant, or analytical chemistry testing. However, in accordance with Special Condition J of this permit, the Department reserves the right to reopen this permit at any time and with notice to the permittee to establish toxics testing requirements pursuant to Chapter 530 based on new information regarding the sources or characterization of wastewater discharged via Outfall #001A.

7. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

With respect to storm water runoff conveyed for discharge via Outfall #001A, this permitting action requires the facility to submit to the Department for review and comment, maintain as current, and periodically update a Storm Water Pollution Prevention Plan (SWPPP) for the facility that is consistent with the SWPPP requirements established in the Department's *Multi-Sector General Permit Maine Pollutant Discharge Elimination System Stormwater Discharge Associated with Industrial Activity*, dated October 11, 2005 (or revisions thereof). As the site or any operations conducted on it have changed or are expected to change materially or substantially, the permittee shall modify its SWPPP as necessary to include such changes and notify the Department within 90 days of such modifications to the plan. The permittee shall maintain a copy of the SWPPP and any subsequent revisions at the terminal and shall make the plan available to any Department or USEPA representative upon request.

7. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (cont'd)

The SWPPP requirements are intended to facilitate a process whereby the permittee thoroughly evaluates potential pollution sources at the power generating station and selects and implements appropriate measures to prevent or control the discharge of pollutants in storm water runoff. The process involves the following four steps: (1) formation of a team of qualified facility personnel who will be responsible for preparing the SWPPP and assisting the terminal manager in its implementation; (2) assessment of potential storm water pollution sources; (3) selection and implementation of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the plan to prevent storm water contamination and comply with the terms and conditions of the permit.

8. ANTIDEGRADATION

Maine law, 38 M.R.S.A. §464(4)(F) contains what is referred to as the State's antidegradation policy. The Department has determined that the action of eliminating the numeric effluent limitation for Total Residual Oxidants is appropriate and justified at this time and will not cause or contribute to the failure of the receiving waterbody to meet the standards of its assigned water quality classification. Elimination of the TRO limit is based on the applicability of effluent guidelines promulgated at 40 CFR Part 423. This permitting action establishes effluent limitations and monitoring requirements for free available chlorine in place of TRO.

9. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class C classification.

10. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily News* newspaper on or about February 3, 2006. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

11. DEPARTMENT CONTACTS

Additional information concerning this permitting action may be obtained from, and written comments sent to:

William F. Hinkel
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7659 Fax: (207) 287-7826
e-mail: bill.hinkel@maine.gov

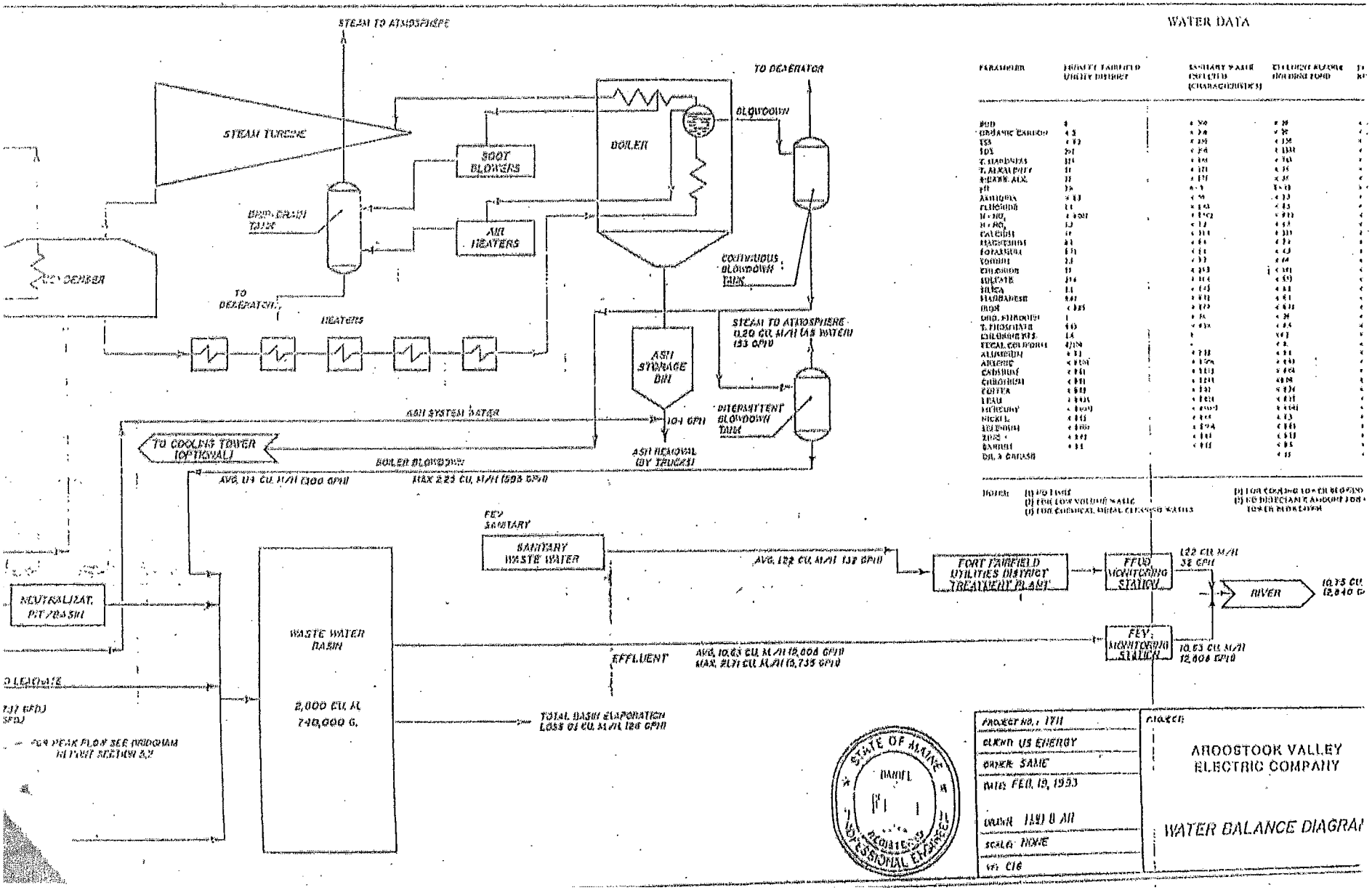
12. RESPONSE TO COMMENTS

During the period of May 11, 2006 through June 9, 2006, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to Boralex Fort Fairfield for the proposed discharge. The Department received no significant comments on the proposed draft permit; therefore, a response to comments was not prepared.

ATTACHMENT A

ATTACHMENT B

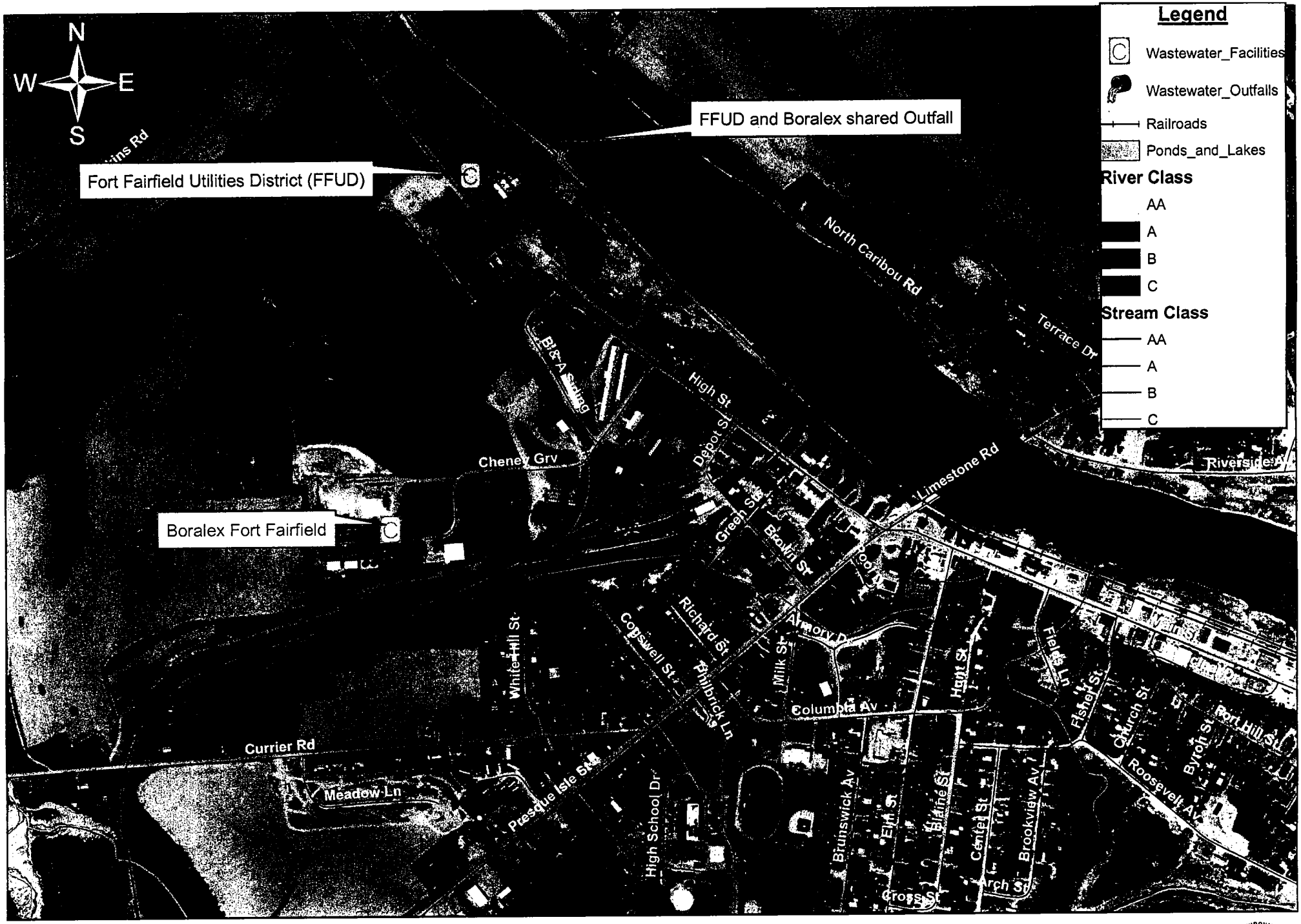
ATTACHMENT A (part 2)



WATER DATA

PARAMETER	PRIVATE FAIRFIELD UTILITY DISTRICT	SANITARY WASTE (EFFLUENT) (CHARACTERISTICS)	EFFLUENT RECEIVING (MOOSEHEAD	TO
BOD	4	< 30	< 30	<
ORGANIC CARBON	< 5	< 24	< 30	<
TSS	< 12	< 25	< 150	<
TDS	261	< 26	< 150	<
T. HARDNESS	114	< 100	< 70	<
T. ALKALINITY	11	< 10	< 15	<
AMMONIA AS N	11	< 10	< 35	<
pH	7.3	6.3	7.0	7
ARSENIC	< 0.1	< 10	< 0.3	<
FLUORIDE	1.1	< 0.5	< 0.5	<
NO_3	< 0.01	< 0.02	< 0.1	<
NO_2	1.3	< 1.2	< 1.5	<
CALCIUM	31	< 10.1	< 10	<
MAGNESIUM	8.1	< 8.6	< 7.2	<
POTASSIUM	0.9	< 1.1	< 0.5	<
SODIUM	2.3	< 3.2	< 4.4	<
CHLORIDE	11	< 0.5	< 1.0	<
SULFATE	10.4	< 10.5	< 5.0	<
SILICA	1.1	< 0.5	< 0.1	<
HARDNESS	0.01	< 0.1	< 0.1	<
IRON	< 0.05	< 0.03	< 0.10	<
DISS. STRONTIUM	1	< 0.1	< 0.1	<
T. PHOSPHATE	0.5	< 0.01	< 0.5	<
CHLORINE RES.	1.6	0	< 0.1	<
FECAL COLIFORM	0/100	-	< 2	<
ALUMINUM	< 0.1	< 0.1	< 0.1	<
ARSENIC	< 0.001	< 0.001	< 0.01	<
CADMIUM	< 0.01	< 0.001	< 0.01	<
CHROMIUM	< 0.01	< 0.001	0.01	0
COPPER	< 0.01	< 0.01	< 0.01	<
LEAD	< 0.01	< 0.01	< 0.01	<
MERCURY	< 0.001	< 0.001	< 0.001	<
NICKEL	< 0.01	< 0.01	< 0.1	<
SELENIUM	< 0.05	< 0.04	< 0.01	<
ZINC	< 0.01	< 0.01	< 0.05	<
BARIUM	< 0.1	< 0.01	< 0.05	<
OIL & GREASE			< 10	<

NOTES: (1) NO LIMIT
(2) FOR LOW VOLUME WASTE
(3) FOR CHEMICAL METAL CLEANING WASTES
(4) FOR COOLING TOWER BLOWDOWN
(5) NO DISINFECTANT AMOUNT FOR TOWER BLOWDOWN



Boralex at Fort Fairfield, Maine

Map created by Maine DEP
May 11, 2006